

# PATENT ABSTRACTS OF JAPAN

(11)Publication number : 55-081471

(43)Date of publication of application : 19.06.1980

(51)Int.Cl.

H01M 12/06

H01M 4/80

H01M 6/18

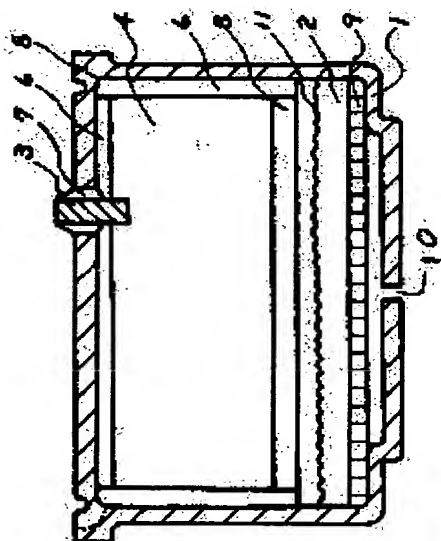
(21)Application number : 53-157016

(71)Applicant : SEIKO INSTR &  
ELECTRONICS LTD

(22)Date of filing : 14.12.1978

(72)Inventor : ITO YUZURU  
ATAKA TATSUAKI

## (54) AIR-LITHIUM BATTERY



### (57)Abstract:

PURPOSE: To obtain an air battery with high output and high energy density by arranging a lithium negative electrode on one side of a solid electrolyte consisting of lithium nitride and a positive electrode consisting of aqueous alkali solution and active carbon on the other side.

CONSTITUTION: The positive electrode can 1 consisting of SUS304 and such has the air vent 10 and the section 8 is laser-welded. For example, inside this positive electrode can 1 there is arranged the positive electrode 2 which consists of the active carbon with its average particle diameter of  $0.1 \square 1 \mu$ ,  $5 \square 20\%$  KOH water solution, Teflon powder, and the metal net 11. At the upper part of this positive electrode 2 there are arranged the solid electrolyte 5 consisting of  $\text{Li}_3\text{N}$  and the negative electrode  $\text{Li}_4$ . These sides are covered by the insulating material 6 consisting of ceramics or synthetic resin. The Teflon film is

contained between the positive electrode 2 and the air vent 10 and is jointly used as a gas transparent and liquid leak resistant micro-porous film. The section between the negative electrode terminal 3 and the positive electrode can 1 is air-tightly melt-sticked by inorganic glass 7 such as borosilicate glass and such.

BEST AVAILABLE COPY

**THIS PAGE BLANK (USPTO)**

## LEGAL STATUS

[Date of request for examination]

[Date of sending the examiner's decision of rejection]

[Kind of final disposal of application other than the examiner's decision of rejection or application converted registration]

[Date of final disposal for application]

[Patent number]

[Date of registration]

[Number of appeal against examiner's decision of rejection]

[Date of requesting appeal against examiner's decision of rejection]

[Date of extinction of right]

Copyright (C); 1998,2003 Japan Patent Office

**THIS PAGE BLANK (USPTO)**